ABSTRACT

Introduction

Coronary Artery disease mainly myocardial infarction is a important cause of mortality in India among all age groups particularly old age. There are many treatment modalities available ranging from life style modification, medical treatment to invasive methods like angioplasty and CABG. In spite of above management methods there is need for non-invasive techniques for better patient compliance and improved prognosis. One such treatment modality is Enhanced external counter pulsation (EECP). The aim of this study was to assess the efficacy of EECP in CAD patients on improvement of functional class and heart function.

Objectives:

Our main objectives are to assess the efficacy of EECP in improving the myocardial perfusion and contractility measured pre and Post EECP treatment with following parameters functional NYHA class improvement, left ventricular LVEF, fractionalshortening, improvement in grade of angina on exertion and also clinical profile of patients were studied.

Results:

In our study a total of 50 patients were selected for study based on inclusion criteria. After EECPActivity limitation improved from 3 and 5 min to 10 and 15 min limit with statistical significance of 0.001.CCS grading of angina improved from grade 2 and 3 to grade 1 and 2 with statistical significance of 0.001.NYHA class improved from class two and three to class one and two,which was also statistically significant with P

value 0f 0.001.Mean EF improved from pre-treatment values before EECP with positive significance. Mean Fractional shortening also improved in these patients post management with EECP.

Conclusion:

To conclude EECP is a non-invasive, well-tolerated, effective treatment for Coronary artery disease. It decreases angina symptoms, improves angina functional class and exercise tolerance and which also improves the individual perception of quality of life. Our study have also demonstrated an improvement of fractional shortening and ejection fraction. Hence EECP can be used as an treatment option For patients with CAD